Global Strategy and European action plan on viral hepatitis. HCV guidelines update.

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WHO Regional Office for Europe

VHPB contry meeting – Russian Federation
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Viral hepatitis: the global epidemic

7th leading cause of death globally (2013)

95% of the burden from hepatitis B and C
Hepatitis mortality is increasing

96% hepatitis deaths from HBV and HCV (cirrhosis and hepatocellular carcinoma)

Sources – WHO Global Health Estimates
In May 2016, the World Health Assembly endorsed the elimination of hepatitis as a public health threat by 2030

• What does “elimination as a public health threat” mean?
  • Incidence reduced by 90%
  • Mortality reduced by 65%

• What are the implications?
  • Countries formulate plans
  • WHO reports on progress
## Eliminating hepatitis by 2030: A package of interventions with high impact

<table>
<thead>
<tr>
<th>Interventions</th>
<th>2030 targets</th>
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<tbody>
<tr>
<td><strong>1. Service coverage</strong></td>
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<tr>
<td>1. Three dose hepatitis B vaccine</td>
<td>90%</td>
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<td>2. HBV PMTCT</td>
<td>90%</td>
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<td>3. Blood and injection safety</td>
<td>100% screened donations</td>
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<td>90% reuse-prevention devices</td>
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<td>100% safe injections</td>
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<td>4. Harm reduction</td>
<td>300 injection sets/PWID/year</td>
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<td>5. Testing and treatment</td>
<td>90% diagnosed</td>
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<td>80% eligible treated</td>
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<td><strong>2. Impact</strong></td>
<td></td>
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<tr>
<td>A. Incidence reduction</td>
<td>90%</td>
</tr>
<tr>
<td>B. Mortality reduction</td>
<td>65%</td>
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PMTCT: Prevention of mother to child transmission
PWID: Person who injects drugs
European Action plan on viral hepatitis

Goal: **Eliminate viral hepatitis as a public health threat by 2030**

Five strategic directions:
1. Information for focused action
2. Interventions for impact - the «what»
3. Delivering for equity - the «how»
4. Financing for sustainability - the financing
5. Innovation for acceleration
September 2016: Resolution (EUR/RC66/Conf.Doc./6)

• align national viral hepatitis strategies with the action plan and strengthen public health systems
• target individuals most affected and at risk
• facilitate partnerships to strengthen the response to viral hepatitis and exchange of best practices and experiences
• monitor and report to 69th and 72nd Regional Committees on implementation of the action plan
Targeting populations most affected

- Responses must be based on the epidemiological and social context
- In many countries, transmission of hepatitis B virus and hepatitis C still occurs in health care settings
- Populations exposed through sexual transmission may include young people and adolescents, men who have sex with men, sex workers, transgender people and prisoners
- People who inject drugs are at high risk of hepatitis C and hepatitis B infection because of the shared use of contaminated injecting equipment
Regional “essential” targets by 2020 on the way to elimination of hepatitis

2015 BASELINE vs 2020 TARGET

- HBV - vaccination
- HBV - PMTCT*
- Blood safety
- Injection safety
- Harm reduction
- HBV - diagnosis
- HCV - diagnosis
- HBV - treatment**
- HCV - treatment

Target 200 syringes/person who inject drugs/year

% coverage

*Measuring the progress on vertical transmission prevention is limited by data on pregnant women screening coverage
** Measuring the progress on HBV treatment is now limited by the absence of data on the proportion of persons eligible

*Source: WHO Global Hepatitis Report, 2017
Countries stepping up to eliminate hepatitis

The number of countries with national hepatitis plans increased from 13 (in 2013) to 22 (in 2017) in our Region
Monitoring and evaluation framework for HBV and HCV

**Context**
- Epidemic

**Inputs**
- System
  - C1. Prevalence
  - C2. Testing facilities
  - C3. Vaccine coverage
  - C4. Needle syringe for PWID
  - C5. Injection safety

**Output & outcomes**
- Cascade of care
  - Prevent
  - Test
  - Treat
  - Heal
  - C6 People diagnosed
  - C7 Treatment coverage / initiation
  - C8 Viral suppression (HBV) or cure (HCV)

**Impact**
- Elimination
  - C9 Incidence
  - C10 Mortality from HCC, cirrhosis
Cascade of care for HBV infection by WHO region, 2016

- 257 million people living with HBV
- Many infected people remain undiagnosed
- 4.5 million people were receiving HBV treatment in 2016 (1.7 million in 2015)

* Measurement of progress on the HBV treatment target is currently limited by the absence of data on the proportion of people who are eligible and the absence of a functional cure.

Source: WHO based on Center for Disease Analysis/Polaris
Hepatitis B cascade of care: people stay on treatment and HBV replication is suppressed

- Lifelong treatment suppresses replication (similar to HIV)
- **Cascade indicators:**
  - People tested and diagnosed (C6)
  - Treatment coverage (C7)
  - Those receiving treatment with suppressed viral loads (C8)

![Graph showing the cascade of care for Hepatitis B from 2016 to 2030](image-url)
Cascade of care for HCV infection by WHO region, 2016

- 71 million people with chronic HCV
- Major gaps in diagnosis
- 1.76 million people started HCV treatment in 2016 (1.10 million in 2015)
- Total: about 3 million (2017)

Source: WHO based on Center for Disease Analysis/Polaris
Hepatitis C cascade of cure: the number of people infected progressively declines

- Short, curative treatment (similar to tuberculosis)
- **Cascade indicators:**
  - People tested and diagnosed (C6)
  - Treatment initiation rate (C7)
  - Proportion cured among the people finishing treatment (C8)
WHO working towards global reporting

1. Prevention indicators are already collected: No need to duplicate these systems.
2. Aggregation of testing and treatment data needed to monitor the cascade
3. New system to monitor the cascade and other pieces missing:
   - Policy uptake
   - Cascade of care and cure
   - Sequelae
4. Online data entry using DHIS2 tools on WHO servers
Progress Report on Access to Hepatitis C Treatment

Focus on overcoming barriers in low- and middle-income countries

• Launched in March 2018
• Reviews the progress countries have made in expanding access to life-saving DAAs
• Delineates the main challenges countries face
• Describes recent developments in affordability, quality assurance, regulatory approval, government commitment and financing
• Highlights key areas for action by ministries of health and other government decision-makers, pharmaceutical manufacturers and technical partners

http://apps.who.int/iris/bitstream/10665/250625/1/WHO-HIV-2016.20-eng.pdf?ua=1
Monitoring price reductions for DAAs

Opportunities: Intensifying competition to reduce prices

Fig. 3.3. Trends in the lowest reported prices for direct-acting antivirals per 28-day supply, 2016–2017

Note: Prices as reported by DAA producers and countries in the WHO 2016 and 2017 surveys

Source: WHO Progress Report on Access to HCV Treatment, March 2018
62% of HCV infected persons live in countries that can currently procure generic DAAs

Source: WHO Progress Report on Access to HCV Treatment, March 2018
What has happened since release of WHO 2016 guidelines on HCV?

- New pan-genotypic DAA regimens approved:
  - Sofosbuvir/Velpatasvir
  - Glecaprevir/Pibrentasvir
- Accumulating evidence on safety and effectiveness of DAA regimens in real world (e.g., Daclatasvir/Sofosbuvir)
- Further guidance needed on when to start treatment and what treatment to use
Whom to treat and when to start?

• New upcoming WHO guidance looks to move towards treating all those infected above 12 years of age (with exception of pregnant women)
  
  • DAAs lead to high rates of cure (SVR) and SVR is associated with reduced all cause mortality, liver related mortality, and reduced incidence of HCC (based primarily on IFN data)
  • SVR is associated with improvement of co-morbidities like diabetes, depression and chronic renal disease
  • Treatment of HCV-infected adolescents is effective and well tolerated
What treatment to use?

WHO is considering the use of pan-genotypic DAA regimens for the treatment of persons with chronic hepatitis C infection aged 18 years and above

- Pan-genotypic DAAs on the market:
  - Sofosbuvir/Velpatasvir
  - Glecaprevir/Pibrentasvir (no access policy yet announced)
  - Daclatasvir/Sofosbuvir (based on real-world observational studies, including MSF data for genotypes 5 and 6)
Simplified testing and management algorithms

1. Single quality assured RDT
2. Prompt or reflex HCV RNA or core Ag
3. Assess and triage: Stage liver disease using NITs (APRI, FIB4, TE)
4. Treat All with Pan-genotypic regimens
5. One-step monitoring One test of cure SVR12
Acknowledgments

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